



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁶: C12N 15/12, C07K 14/47, A61K 38/08, 38/10, 38/17, C12N 15/11, 15/86, C07K 16/18, C12Q 1/68, A61K 35/14, A01K 67/027, C12N 5/08	A3	(11) International Publication Number: WO 99/18206 (43) International Publication Date: 15 April 1999 (15.04.99)
(21) International Application Number: PCT/US98/19609 (22) International Filing Date: 21 September 1998 (21.09.98) (30) Priority Data: 60/061,428 8 October 1997 (08.10.97) US (63) Related by Continuation (CON) or Continuation-in-Part (CIP) to Earlier Application US 60/061,428 (CIP) Filed on 8 October 1997 (08.10.97) (71) Applicant (for all designated States except US): THE GOVERNMENT OF THE UNITED STATES OF AMERICA, represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; Office of Technology Transfer, National Institutes of Health, Suite 325, 6011 Executive Boulevard, Rockville, MD 20852 (US). (72) Inventors; and (75) Inventors/Applicants (for US only): WANG, Rong, Fu [US/US]; 4949 Battery Lane #409, Bethesda, MD 20814	(US). ROSENBERG, Steven, A. [US/US]; 10104 Iron Gate Road, Potomac, MD 20854 (US). (74) Agents: FEILER, William, S. et al.; Morgan & Finnegan, L.L.P., 345 Park Avenue, New York, NY 10154 (US). (81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> (88) Date of publication of the international search report: 5 August 1999 (05.08.99)	
(54) Title: HUMAN CANCER ANTIGEN NY ESO-1/CAG-3 AND GENE ENCODING SAME (57) Abstract <p>The present invention discloses the identification, isolation and cloning of a gene encoding a novel cancer antigen NY ESO-1/CAG-3 and peptides thereof derived from various open reading frames from the NY ESO-1 gene. The novel cancer antigen and peptides are recognized by cytotoxic T lymphocytes in an HLA restricted manner. The products of the gene are promising candidates for immunotherapeutic strategies for the prevention, treatment and diagnosis of patients with cancer.</p>		